

Remarks

The Applicants have amended Claim 9 simply for typographical purposes and to further delineate certain of the steps by breaking them into separate paragraphs. No changes to the scope of the claims have been made.

The Applicants acknowledge the rejection of Claims 9 – 17 under 35 U.S.C. §103 over EP ‘084. The Applicants note with appreciation the Examiner’s helpful and detailed comments concerning the applicability of EP ‘084 to those claims. The Applicants respectfully submit that Claims 9 – 17 are patentable over EP ‘084 for the reasons set forth in detail below.

The Applicants agree with the Examiner’s frank acknowledgment that EP ‘084 does not teach cold rolling at least twice with intermediate annealing in between. This is important for at least two reasons. First, the Applicants specifically claim cold rolling at least twice with intermediate annealing in between. EP’084 discloses one time cold rolling. These are very different things. Also, one time cold rolling is not suggestive of at least twice with intermediate annealing. Second, EP ‘084 mentions cold rolling essentially in passing as one of a number of steps of the overall process. No importance with respect to the inventive aspect of that disclosure is directed to cold rolling. Instead, importance is directed to the hot rolling steps and the temperature differences between the center of the plate thickness and the plate surface, among other things. The only real disclosure concerning cold rolling may be found on page 11 in Table 2 wherein a range of cold rolled reduction of 81 – 90% is disclosed.

However, irrespective of that range of reduction, which the Applicants acknowledge falls within the “gross reduction” of about 75% or more in Claim 9, there is utterly nothing in EP ‘084 that teaches or suggests a “reduction ratio (reduction in the first cold rolling)/(reduction in the final cold rolling) in the range of about 0.7 to about 1.3.” There simply is no mention whatsoever

concerning multiple steps of cold rolling, as noted above, much less the claimed reduction ratio of 0.7 to 1.3.

Thus, assuming *arguendo* that it would have been obvious and a matter of choice well within the skill of those of ordinary skill in the art to incorporate annealing in between cold working to produce no more than the known expected effect of such an addition as set forth in the Official Action, the result would still be a process wherein there is cold rolling at least twice with intermediate annealing therebetween and the cold rolling performed at a reduction of 81 – 90% in accordance with the teachings of EP ‘084.

Importantly, however, there would still be a failure to disclose, teach or suggest the specifically claimed reduction ratio (reduction in the first cold rolling)/(reduction in the final cold rolling) in the range of about 0.7 to about 1.3. Thus, EP ‘084 is non-enabling with respect to that specifically claimed portion of Claim 9 and cannot support a rejection under §103. Withdrawal of the rejection of Claims 9 – 17 is respectfully requested.

The Applicants acknowledge the rejection of Claims 9 – 17 under 35 U.S.C. §103 over EP ‘206. EP ‘206 is similar to EP ‘084 in the sense that it 1) discloses one time cold rolling and 2) mentions cold rolling in passing. In fact, the disclosure of EP ‘206 is less instructive than that of EP ‘084 inasmuch as it does not provide a range of cold rolling, merely one short passage, as helpfully noted by the Examiner, that there is a cold rolled reduction of 82.5% on line 3 of page 8. The Applicants note that the exact language of EP ‘206 is “cold rolling (reduction ratio 82.5%)”.

The Applicants note that the “reduction ratio” referred to in EP ‘206 is not the same “reduction ratio” referred to in Claim 9. Claim 9 specifically refers to a gross reduction of about 75% or more and, separately, specifically refers to a reduction ratio in the range of about 0.7 to about 1.3 and defines that reduction ratio as reduction of the first cold rolling/reduction in the final cold

rolling. Thus, the reduction ratio of 82.5% in EP '206 really refers to the “gross reduction” referred to in Claim 9, not the specifically defined reduction ratio of Claim 9. This is borne out by virtue of the fact that the reduction ratio of EP '206 is 82.5%, noting in particular the percentage units. In sharp contrast, the claimed reduction ratio as recited in Claim 9 is truly a ratio, with a range of about 0.7 to about 1.3.

In any event, EP '206 fails to be applicable to Claims 9 – 17 for the same reasons set forth above with respect to EP '084. EP'206 discloses one time cold rolling and the Applicants specifically claim cold rolling at least twice with intermediate annealing. These are very different. Also, there is no disclosure, teaching or suggestion in EP '206 to have a specifically defined reduction ratio of any range, much less the claimed range of about 0.7 to about 1.3. The Applicants accordingly respectfully request withdrawal of the rejection.

The Applicants acknowledge the rejection of Claims 18 – 26 under 35 U.S.C. §103 over the hypothetical combination of Moyle or Omosako with either of EP '084 or EP '206. The Applicants respectfully submit that one of ordinary skill in the art would not make the hypothetical combination in the first place and, even if the hypothetical combination were to be made, that the resulting process would be different from the process set forth in Claims 18 – 26.

The Applicants note the Examiner's frank acknowledgment that EP '084 does not teach a bake-coated stainless steel sheet with a lubricant comprising acrylic resin, calcium stearate and polyethylene wax. In fact, the Applicants have carefully studied the entire text of EP '084 and there is simply no discussion of a lubricant at all.

EP '206 discusses “lubrication” in the context of the prior art and a “lubricant” as well as the “lubricating method... in accordance with known methods.” However, as noted above, this in no way discloses, teaches or suggests a lubricant comprising acrylic resin, calcium stearate and

polyethylene wax.

Both of Moyle and Omosako are cited to make up for the lack of disclosure in both of EP '084 and EP '206. This is, however, problematic, inasmuch as both of Moyle and Omosako also fail to disclose, teach or suggest a lubricant comprising acrylic resin, calcium stearate and polyethylene wax. For example, Moyle discloses a coating which is intended to protect against corrosion. Of course, this is sharply different than the Applicants' bake-coated lubricant coat that is intended to facilitate deep drawing, among other things. In any event, the coating disclosed by Moyle is an epoxy resin, chromium trioxide and water. This has nothing to do with a lubricant comprising an acrylic resin, calcium stearate and polyethylene wax as recited in Claims 18 – 26.

Accordingly, the Applicants respectfully submit that one of ordinary skill in the art would not make the hypothetical combination in the first place and, even if the combination were to be made, the resulting steel sheet would still fail to teach or suggest the subject matter of Claims 18 – 26. Specifically, Moyle discloses a coating to protect against corrosion. That is not the Applicants' reason for applying for bake-coating the lubricant and is also not a reason set forth in either of EP '206 or EP '084. As noted above, EP '084 does not mention lubricants at all. Also, to the extent that the Applicants were trying to provide a lubricant to facilitate drawing, EP '084 provides utterly no help at all on this point and neither does Moyle. The Moyle lubricant is specifically stated for protection against corrosion, not for facilitation of deep drawing.

EP '206 merely refers to "lubricant." No motivation is provided to one of ordinary skill in the art to look elsewhere for lubricants of a particular type. Thus, there is nothing to be gained by looking to Moyle for a coating that is intended to protect against corrosion.

Omosako also goes in a completely different direction from the subject matter of Claims 18 – 26 and from the primary references. Omosako discloses a lubricant which comprises a thickener and

iron hydroxide powder. The thickener can be cellulose ether or polyacrylic acids. The lubricant of Omosako is intended to protect against roll scoring which, again, has nothing to do with the subject matter of Claims 18 – 26 and, importantly, has nothing to do with EP ‘084 and nothing to do with EP ‘206. Thus, one of ordinary skill in the art would have no motivation to look to Omosako when attempting to provide a lubricant that facilitates deep drawing. Thus, the Applicants respectfully submit that one of ordinary skill in the art would have no motivation to combine either of the secondary references with either of the primary references. The Applicants therefore respectfully submit that the combination must fail on that basis alone.

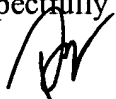
Nonetheless, there are further compelling reasons as to why the rejection must fail. As noted above, Moyle discloses a coating comprising epoxy resin, chromium trioxide and water. Omosako discloses a lubricant comprising a thickener and iron hydroxide powder. Accordingly, both of the secondary references utterly fail to disclose, teach or suggest acrylic resin, calcium stearate and polyethylene wax as recited in Claims 18 – 26. As a consequence, even if one of ordinary skill in the art were to combine either of the secondary references with either of the primary references, the resulting steel sheet would have a lubricant that comprises either a thickener and iron hydroxide powder or epoxy resin, chromium trioxide and water. Neither of those lubricants comprises acrylic resin, calcium stearate and polyethylene wax. The Applicants accordingly respectfully submit that the secondary references are non-enabling with respect to lubricants as recited in Claims 18 – 26. They are just completely different lubricants and, even if combined with the primary references, result in a steel sheet that has nothing to do with the subject matter of Claims 18 – 26.

Moreover, the Applicants’ claims recite that the lubricant is a bake-coated lubricant. There is utterly no disclosure in any of the four references as to bake-coated lubricants. Thus, hypothetically combining either secondary reference with either primary reference would still fail to teach or

suggest a bake-coated lubricant. Finally, EP'084 and EP'206 fail to disclose, teach or suggest the Applicants' claimed cold rolling at least twice with intermediate annealing. They only disclose a single cold rolling. Thus, the combination of all of the references would still fail to teach or suggest the subject matter of Claims 18-26. The Applicants accordingly respectfully request withdrawal of the rejection.

In light of the foregoing, the Applicants respectfully submit that the entire Application is now in condition for allowance, which is respectfully requested.

Respectfully submitted,



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